

REMARKS

In the Office Action of October 2, 2007, the Abstract of the Disclosure has been objected to as containing more than 150 words. The applicant has accordingly amended the Abstract to address and overcome this issue.

Claims 1, 8 and 9 were objected to in that claim 1 recites an angle “R” not present in the drawings nor recited in the specification, and the claims from which claims 8 and 9 depend do not provide antecedent basis for “the bearing bracket” recited in these claims. The recitation in claim 1 of an angle “R” was a typographical error which has been corrected to now recite the angle as “ β ”. The dependency of claims 8 and 9 has been changed to claim 7 to provide antecedent basis for the bearing bracket.

Claims 1, 2 and 7 have been rejected as assertedly anticipated by Pohn et al. U.S. Patent No. 5,111,651. The applicant respectfully disagrees and therefore traverses the rejection of these claims. Reconsideration is respectfully requested in light of the foregoing amendments in claim 1 and the following remarks. Applicant gratefully acknowledges the indication that dependent claims 3-6, 8 and 9 set forth patentable subject matter and would be allowable if rewritten in independent form, but applicant believes rewriting of the claims should be unnecessary for the reasons advanced below as to the allowability of independent claim 1.

Briefly summarized, as described in greater detail in the present application, the present invention provides an improvement in an open-end spinning device in which the relative operational spinning position of the sections of the fiber guide conduit relative to each other can be selectively adjusted such that during actual spinning operation, i.e., with the cover of the spinning device closed over the rotor housing, the fiber guide conduit sections have preselectable defined relative positions.

In this manner, an open-end spinning device in accordance with the invention enables the angular position of the fiber guide conduct sections at the inlet side of the rotor to be matched to the specific prevailing conditions, and in this way enables the flow conditions within the fiber guide conduits to be optimized at all times so that it is possible to produce a yarn with optimal dynamic yarn values. It is believed that independent claim 1 as originally presented sets forth these distinguishing features of the present invention, but claim 1 has been amended hereinabove to make these novel aspects of the invention even more clear.

The cited Pohn et al. reference clearly does not disclose or suggest this capability for defined operational adjustability of the angular position assumed by the fiber guide conduit sections in the course of the actual spinning process, i.e. with the spinning device closed, to selectively set flow conditions in the fiber guide conduit. Rather Pohn et al. is merely representative of one general type of known existing prior art open end spinning device.

Specifically, it is acknowledged that open-end spinning devices are known in various kinds of embodiment, and that it is known to configure the fiber guide conduit of such devices in two sections. For example, in one general type of open-end spinning device, a portion of the fiber guide conduit is mounted in the cover of the device and therefore naturally is always moved away whenever the spinning device may be opened when not in actual operation. In other known open end spinning devices, the entire sliver opening arrangement, including the entirety of the fiber guide conduit, is a part of the cover structure and therefore is always pivoted away from the rotor housing when the spinning device is opened while out of operation.

Open-end spinning devices of the first mentioned type are known, for example, from U.S. Patent No. 4,653,266. Such open-end spinning devices have a rotor supported in a stationarily

arranged bearing device to rotate inside a rotor housing, and a sliver opening arrangement which is also arranged to be stationary. In the course of the operational spinning process, the rotor housing of such open-end spinning devices is closed by a so-called conduit plate, which is a part of a pivotably seated cover element. In these devices, the conduit plate has, among other things, a fiber conduit section on an outlet side. An associated fiber conduit section on an inlet side is directly integrated into the stationarily arranged opening roller housing of the sliver opening arrangement. Thus, during the actual spinning operation, i.e. with the open-end spinning device closed, the two fiber guide conduit sections are always arranged at a fixed angular position in relation to each other which is not adjustable nor otherwise changable. The relative angular position of the two fiber guide conduit sections in respect to each other naturally changes, but only temporarily and not operationally, when opening the cover of the open-end spinning device because the outlet-side fiber guide conduit section is seated in the conduit plate of the pivotable cover element.

Thus, in such open-end spinning devices, there is only a temporary, completely non-functional change of the angular position of the two fiber guide conduit sections in the course of opening the spinning device, but this structure does not provide for any operational adjustability of the relative dispositions of the fiber guide conduit sections and therefore is not comparable in any way with, and does not disclose or suggest, an open-end spinning devices in accordance with the present invention wherein the angular position of the two fiber guide conduit sections in their operating dispositions with the spinning device closed are definitively adjustable for obtaining optimal flow conditions and optimal dynamic yarn values.

The other aforementioned type of open-end spinning devices, in which the entire fiber guide conduit as well as a sliver opening arrangement are arranged on a pivotably seated cover

element, is represented, for example, by U.S. Patent No. 6,953,897. In these known open-end spinning devices, a spinning rotor rotates in a rotor housing in a stationary bearing arrangement. When opening the cover to the open-end spinning device, the entire sliver opening arrangement, including the complete fiber guide conduit, is pivoted away around a pivot shaft.

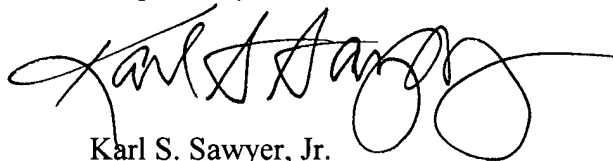
Although the fiber guide conduit in such open end spinning devices consists of an inlet-side fiber guide conduit section and an outlet-side fiber guide conduit section, the inlet-side section is fixed in the opening roller housing, while the outlet-side fiber guide conduit section is integrated into a so-called conduit plate adapter. When required, this arrangement of the fiber guide conduits makes it possible by exchange of the conduit plate adapter to match the length of the overall fiber guide conduit to the respective diameter of the spinning rotor employed. However, it is not possible in such open-end spinning devices to adjust or change the relative angular position which occurs between the inlet-side and outlet-side fiber guide conduct sections during the actual operation of the spinning process.

In open-end spinning machines of the first type known from U.S. Patent No. 4,653,266 described above, an O-ring sealing of the contact area between the stationary inlet-side fiber guide conduit section and the outlet-side fiber guide conduit section on the conduit plate of the cover element has been known in the prior art but has often been problematic, resulting in proposals in the prior art for modifying this contact area. The cited reference to Pohn et al. is merely representative of such an open-end spinning device of this type wherein the fiber guide section contact area has been modified to replace an O-ring seal between the two fiber guide conduit sections with a special spring-loaded insert element. This insert element is seated with some play, and is axially movable as well, and the inlet-side fiber guide contact section is cut into this insert element via a corresponding guide bore in the stationary opening roller housing.

With the spinning device closed, the spring-loaded insertion element rests with a front face sealingly against the conduit plate in the pivotable cover element, which carries the outlet-side fiber guide conduit section, and is thereby automatically aligned in respect to the conduit plate. Importantly, however, it is neither disclosed nor suggested, and indeed is not even possible, in this arrangement in Pohn et al. to selectively adjust the angular position of the two fiber guide conduit sections in their operating position assumed during the actual spinning process, and particularly the Pohn et al. arrangement does not enable the selective adaptation of optimal dynamic yarn values.

Accordingly, for all of the reasons set forth above, it is respectfully submitted that the present invention as defined in independent claim 1 as amended is patentably distinguishable over the Pohn et al. and all other references of record. Favorable reconsideration and allowance of the standing claims is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Karl S. Sawyer, Jr.', with a large, stylized flourish at the end.

Karl S. Sawyer, Jr.
Reg. No. 28,902
Kennedy Covington Lobdell & Hickman LLP
Hearst Tower, 47th Floor
214 North Tryon Street
Charlotte, North Carolina 28202
Telephone (704) 331-5792
-- Attorney for Applicants